



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/909,544 | 07/19/2001 | Tom F. Luc | 220022001600 | 1956 |

25225 7590 09/20/2002

MORRISON & FOERSTER LLP
3811 VALLEY CENTRE DRIVE
SUITE 500
SAN DIEGO, CA 92130-2332

EXAMINER

QIAN, CELINE X

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1636

DATE MAILED: 09/20/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,544

Applicant(s)

LU, ET AL.

Examiner

Celine Qian

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claims 1-22 are pending in the application.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5, 9, 11-15 and 21 drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering VEGF protein, classified in class 424, subclass 198.1.
- II. Claims 1-8, 10-15 and 22, drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering nucleic acid encoding VEGF, classified in class 514, subclass 44.
- III. Claims 1-5, 11-15, drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering an enhancer for VEGF expression, classified in class 536, subclass 24.5.
- IV. Claims 1-5, 11-15, drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering an enhancer for VEGF function, classified in class 424, subclass 130.1.
- V. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more of VEGF protein, classified in class 530, subclass 399.

Art Unit: 1636

- VI. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more of nucleic acids encoding VEGF, classified in class 435, subclass 320.1.
- VII. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances VEGF production, classified in class 536, subclass 24.5.
- VIII. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances VEGF function, classified in class 424, subclass 130.1.
- IX. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more of VEGF protein, classified in class 424, subclass 198.1.
- X. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more nucleic acids encoding VEGF protein, classified in class 514, subclass 44.
- XI. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an

agent that stimulates male erectile or female sexual function and one or more
agent that enhances VEGF production, classified in class 536, subclass 24.5.

- XII. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more agents that enhances VEGF function, classified in class 424, subclass 130.1.
- XIII. Claims 1-5, 9, 11-15 and 21 drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering BDNF protein, classified in class 424, subclass 198.1.
- XIV. Claims 1-8, 10-15 and 22, drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering nucleic acid encoding BDNF, classified in class 514, subclass 44.
- XV. Claims 1-5, 11-15, drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering an enhancer for BDNF expression, classified in class 536, subclass 24.5.
- XVI. Claims 1-5, 11-15, drawn to a method of preventing or treating male erectile dysfunction or female sexual arousal disorder by administering an enhancer for BDNF function, classified in class 424, subclass 130.1.
- XVII. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more of BDNF protein, classified in class 530, subclass 399.

- XVIII. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more of nucleic acids encoding BDNF, classified in class 435, subclass 320.1.
- XIX. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances BDNF production, classified in class 536, subclass 24.5.
- XX. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances BDNF function, classified in class 424, subclass 130.1.
- XXI. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more of BDNF protein, classified in class 424, subclass 198.1.
- XXII. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more nucleic acids encoding VEGF protein, classified in class 514, subclass 44.
- XXIII. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an

agent that stimulates male erectile or female sexual function and one or more

agent that enhances VEGF production, classified in class 536, subclass 24.5.

XXIV. Claim 19, drawn to a method for preventing or treating male erectile dysfunction

or female sexual arousal disorder by administering a combination comprising an

agent that stimulates male erectile or female sexual function and one or more

agents that enhances BDNF function, classified in class 424, subclass 130.1.

XXV. Claims 1-5, 9, 11-15 and 21 drawn to a method of preventing or treating male

erectile dysfunction or female sexual arousal disorder by administering bFGF

protein, classified in class 424, subclass 198.1.

XXVI. Claims 1-8, 10-15 and 22, drawn to a method of preventing or treating male

erectile dysfunction or female sexual arousal disorder by administering nucleic

acid encoding bFGF, classified in class 514, subclass 44.

XXVII. Claims 1-5, 11-15, drawn to a method of preventing or treating male erectile

dysfunction or female sexual arousal disorder by administering an enhancer for

bFGF expression, classified in class 536, subclass 24.5.

XXVIII. Claims 1-5, 11-15, drawn to a method of preventing or treating male erectile

dysfunction or female sexual arousal disorder by administering an enhancer for

bFGF function, classified in class 424, subclass 130.1.

XXIX. Claims 16-18 and 20, drawn to a combination for preventing or treating male

erectile dysfunction or female sexual arousal disorder comprising an agent that

stimulates male erectile or female sexual function and one or more of bFGF

protein, classified in class 530, subclass 399.

- XXX. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more of nucleic acids encoding bFGF, classified in class 435, subclass 320.1.
- XXXI. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances bFGF production, classified in class 536, subclass 24.5.
- XXXII. Claims 16-18 and 20, drawn to a combination for preventing or treating male erectile dysfunction or female sexual arousal disorder comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances bFGF function, classified in class 424, subclass 130.1.
- XXXIII. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more of bFGF protein, classified in class 424, subclass 198.1.
- XXXIV. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more nucleic acids encoding bFGF protein, classified in class 514, subclass 44.

XXXV. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more agent that enhances bFGF production, classified in class 536, subclass 24.5.

XXXVI. Claim 19, drawn to a method for preventing or treating male erectile dysfunction or female sexual arousal disorder by administering a combination comprising an agent that stimulates male erectile or female sexual function and one or more agents that enhances bFGF function, classified in class 424, subclass 130.1.

The inventions are distinct, each from the other because of the following reasons.

The inventions of Groups V-VIII, XVII-XX, XXIX-XXXII are patentably distinct from the inventions of Groups I-IV, IX-XII, XXIII-XXVI, XXI-XXIV, XXV-XXVIII, XXXIII-XXVI because the inventions are drawn to compositions and methods that are not directly related. The methods of Groups I-IV, IX-XII, XXIII-XXVI, XXI-XXIV, XXV-XXVIII, XXXIII-XXVI can be carried out using other compositions rather than the compositions claimed in Groups V-VIII, XVII-XX, XXIX-XXXII, for example, Viagra. Therefore, the inventions of Groups V-VIII, XVII-XX, XXIX-XXXII are patentably distinct from the inventions of Groups I-IV, IX-XII, XXIII-XXVI, XXI-XXIV, XXV-XXVIII, XXXIII-XXVI.

The inventions of Groups V-VIII, XVII-XX, XXIX-XXXII are patentably distinct from each other because the inventions are drawn to materially distinct compositions. The protein, nucleic acid, expression enhancer and functional enhancer of Groups V-VIII, XVII-XX, XXIX-

Art Unit: 1636

XXXII are biologically, chemically and functional different from each other. Therefore, the inventions of Groups V-VIII, XVII-XX, XXIX-XXXII are patentably distinct.

The inventions of Groups I-IV, IX-XII, XXIII-XXVI, XXI-XXIV, XXV-XXVIII, XXXIII-XXVI are patentably distinct from each other because the inventions are drawn to methods that require different starting materials and modes of operation. Each method involves different method steps. Therefore, the inventions of Groups I-IV, IX-XII, XXIII-XXVI, XXI-XXIV, XXV-XXVIII, XXXIII-XXVI are patentably distinct.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. A search of the subject matter of one invention would not be co-extensive with a search of the other invention, and therefore the search would be burdensome. Each invention is capable of supporting a separate patent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celine X Qian whose telephone number is 703-306-0283. The examiner can normally be reached on 9:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel can be reached on 703-305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Application/Control Number: 09/909,544

Page 10

Art Unit: 1636

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Celine Qian, Ph.D.
September 7, 2002

Terry A. McKelvey
TERRY MCKELVEY
PRIMARY EXAMINER